New X-Ray Film Processing Seeks to Reduce Radiation

(See story on page 1 also)

By ROBERT BYERS
Denver Post Staff Writer

A Denver photographic firm Thursday reported encouraging success with a new method of processing X-ray films which makes it possible to reduce radiation exposure of patients by 70 pct.

If the method proves out, it will have important significance in medicine and in cutting back the overal llevels of ionizing radiation to which patients are exposed for X-ray diagnostic and screening procedures.

The work was described by Jay Wilson, president of Veljay Color, Inc., 2401 S. Downing St.

The firm specializes in making color photographs, transparencies and murals from ordinary black and white negatives by using a darkroom chemical process developed by Wilson which brings out more of the latent image on the negative than conventional processing methods.

Wilson said the processing of X-ray films exposed to lower amounts of radiation represents a nextension and modification of the company's basic color process.

Preliminary work, Wilson said, has been carried out at the University of Colorado Medical Center in cooperation with Arnold Feldman, CU radiation physicist.

Wilson said the hand of a skeleton used for teaching at the medical center was covered with half an inch of masonite to simulate flesh and soft tissue.

An X-ray film was then made of the hand using only 3/10th of the amount of X-radiation usually used in such examinations.

Wilson said his new darkroom process was used to develop the film and the quality of the film was "every bit as good" as those made higher radiation exposures and conventional techniques of development.

Wilson declined to disclose details of the developing technique to protect his company's basic process.

He said if the process is proved out in further trials at CU, physicians and X-ray technicians could be taught the technique and provided with the special supplies needed.

CONCERN OVER RADIATION

There has been growing concern nationwide over the amount of radiation used in doctors' offices and hospitals.

Feldman said a process in which X-rays could be made with 3/10ths of the amount of radiation now used would be an important contribution in quieting fears of the public and in reducing the hazard involved in X-ray procedures.

Wilson said he believes his technique also is applicable to the making of X-ray motion pictures which will show internal organs and structures functioning.

Such motion pictures can now be made, but the amounts of radiation needed are so high as to make them impractical except in extreme cases.

COLOR FROM AIR

Also Thursday, Wilson and Louis L. Watson of the Global Exploration Co., announced that aVeljay process for making high quality color aerial photographs will be put into use soon in Arizona.

Watson said the process will be used to carry out exploration for copper deposits under a contract with the Phelps-Dodge Corp. By using color, Watson said, geologists will be able to map more accurately extensions of copper deposits in the area of a Pheps-Dodge open pit mining operation in Arizona.

The aerial work is being carried out by Veljay Air-Color Corp., a firm mutually owned by Global and Veljay Color, Inc.